

TECHNICAL NOTES¹

SURVEY UNIVERSE

The data collected in the fall 2000 Survey of Graduate Students and Postdoctorates in Science and Engineering represent national estimates of graduate enrollment and postdoctoral employment at the beginning of academic year 2000–2001 in all academic institutions in the United States that granted doctorate or master's degrees in any science or engineering field. Included are data for all branch campuses, affiliated research centers, and separately organized components such as medical or dental schools, schools of nursing, public health, etc. The survey universe consisted of 717 reporting units at 596 graduate institutions, including 236 master's-granting institutions and 481 reporting units associated with 360 doctorate-granting institutions.

The National Science Foundation (NSF) has collected data on graduate science and engineering (S&E) enrollment and postdoctoral appointees since 1966. From fall 1966 through fall 1971, data from a limited number of doctorate-granting institutions were collected through the NSF Graduate Traineeship Program, which requested data only on those S&E fields supported by NSF. Beginning with the fall 1972 survey, this data collection effort was assigned to NSF's Universities and Nonprofit Institutions Studies Group and was gradually expanded from 1972 to 1975 to include additional S&E fields as well as all institutions known to have programs leading to a master's or doctoral degree. Due to this expansion, data for 1974 and earlier years are not strictly comparable with 1975 and later data. Technical table 1 shows the number of institutions, reporting units, and departments at each level included in the data, as well as the total enrollment reported for each year between 1966 and 1999. No attempt has been made to inflate the data for 1966–74 to reflect universe totals.

Beginning with the 1984–85 academic year, master's-granting institutions were surveyed on a sample basis. From 1984 through 1987 the survey design was a stratified random sample, with all doctorate-granting institutions, all master's-granting historically black colleges and universities, and all land-grant institutions included in the certainty stratum. The remaining master's-granting institutions were divided into two sample strata on the basis of enrollment size. Data for

sampled institutions for the years 1984–87 were reestimated in 1988 on the basis of 1983 and 1988 data. During the 1989 survey cycle, S&E field definitions were reviewed and some departments were deleted. Data for 1975 through 1988 were adjusted to conform to the revised definitions.

The fall 1988 survey included the entire survey population for the first time since 1983–84. Since 1988, any institutions starting up S&E master's or doctoral programs have been added to the survey universe, and any that have closed all their S&E graduate programs have been deleted. (See Survey Methodology, below.)

Technical tables 2 and 3 present data on departmental coverage by S&E field for doctorate- and master's-granting institutions for the last 8 years surveyed.

SURVEY INSTRUMENTS

The survey questionnaire on which data are reported in this publication is essentially the same as that used for the 1999 collection. In addition to the questionnaire proper, each survey package also included the following:

- an enclosure detailing mailing package contents;
- a flyer explaining NSF's academic S&E surveys;
- a cover letter to survey coordinators at graduate schools or at medical schools;
- a computer-generated List of Departments or Programs (NSF Form 811) specific to each institution surveyed and based on the departments known to exist in the previous survey cycle;
- a "crosswalk" showing National Center for Education Statistics instructional program codes corresponding to each S&E field as defined by NSF;
- a postcard for respondent use acknowledging receipt of the survey and indicating any changes in coordinator name, address, telephone number, or e-mail address;
- an "ID and Password" flyer informing coordinators of their IDs and passwords so they could access the new NSF-NIH Graduate Student Survey Web-Based Data Reporting System; and

¹See <http://www.nsf.gov/sbe/srs/sgss/start.htm> for a more detailed discussion of the methodology used in this survey.

- an “Accessing NSF Data on the Internet” sheet encouraging coordinators to view last year’s data on the Web via the NSF Science Resources Statistics home page.

SURVEY METHODOLOGY

The survey packages were mailed out by November 10, 2000. This was the third year in which schools had the option of reporting data using the NSF-NIH Graduate Student Survey Web-Based Data Reporting System. Four hundred and thirty-six schools chose to report data using the Web system. The final survey universe consisted of 717 reporting units at 596 institutions.

In addition to the verification information cited above, the acknowledgment postcard also requested that institutional coordinators indicate how the data were collected, whether the data were maintained centrally or collected from individual departments, and whether they were derived from a computerized database or hand tabulated. Of the 717 reporting units surveyed, 98.9 percent have provided this information over the past 10 years. The majority of schools report a combination of sources for their data. Over the years, the use of computerized systems has shown a gradual but small increase, while the use of hand tabulation has slowly decreased.

Institutional coordinators were asked to review the departmental listing provided in the survey packet and to indicate any changes in their departmental structure such as departments newly formed, phased out, split, or merged; they were also asked to check off any departments that had neither graduate students nor postdoctorates and for which survey questionnaires would therefore not be submitted. The revised Form 811s were returned to NSF’s data processing contractor for use as a checklist in tracking departmental responses.

A survey questionnaire was completed for each department either centrally or at the department level and was returned to the data processing contractor for data entry, editing, and tabulation. Arithmetic errors, inconsistencies between items, and sharp year-to-year fluctuations were referred to the institutional coordinators for correction or clarification.

RESPONSE RATE

Of the 717 reporting units included in the fall 2000 survey, 708—or 98.7 percent—were able to provide at least partial data.

At the departmental level, 11,783 departments responded, or 99.0 percent of the 11,899 departments surveyed. Of these, 9,818 departments, or 82.5 percent of the total, provided complete responses. A total of 116 departments, or 1.0 percent of the departmental total, required complete imputation; 1,965, or 16.5 percent, had one or more data cells imputed. Technical table 4 presents the department response rates for earlier years for comparison.

Missing data for partially nonrespondent departments were imputed using the departments’ previous year’s data, where available, or data from peer institutions in cases where data had not been reported the previous year. Data for nonrespondent departments (those that did not provide any data) were imputed using data from the previous year, where available. The number of departments in doctorate- and master’s-granting institutions that required total or partial imputation, and the numbers and proportions of full- and part-time graduate students and postdoctorates imputed, are shown in technical tables 5 and 6. Imputation rates by survey data item are provided in technical table 7.

CHANGES IN DATA ITEMS

Although NSF has attempted to maintain consistent trend data, some modifications in the survey questionnaire have been made to respond to changing issues over the past 25 years. As a result, some data items are not available for all institutions in all years.

Major changes in the data collected are as follows:

- From 1975 through 1977, data for master’s-granting institutions were collected on a short form (i.e., an abbreviated form of the survey) that did not collect data on sex or citizenship of graduate students, nor any data on postdoctoral appointees. In 1978, a similar questionnaire was sent to doctorate-granting institutions; master’s-granting institutions were not surveyed that year. This 1978 questionnaire did not collect data on mechanisms of support for full-time students. All mechanisms of support data for that year were combined on one line and appear as “other types of support” in any data tables. The 1978 figures shown in the tables for master’s-granting institutions represent estimates based on 1977 and 1979 data. Beginning in 1979, the full-scale survey form was sent to both doctorate- and master’s-granting institutions.

- Distribution by sex was originally requested only for full-time graduate students at doctorate-granting institutions. Beginning in 1976, master's-granting institutions were also asked to provide data on all graduate students by sex; in 1977, similar data were requested for all graduate students in all institutions. The short form used in 1978 did not request any information on sex; 1978 figures in the tables represent estimates based on 1977 and 1979 data.
 - Citizenship data were collected only for graduate students enrolled full time in doctorate-granting institutions through 1977. No citizenship data were requested on the short form used for master's-granting institutions in 1975 through 1977 and for doctorate-granting institutions in 1978. Data on citizenship of all full-time graduate students are available beginning in 1979 and on those enrolled part time since 1983.
 - Racial/ethnic data were first requested in 1979 and became a standard item on the questionnaire in 1980.
 - The support mechanisms of "fellowships and traineeships" were combined on one line until 1979, when separate data on the two mechanisms were first collected.
 - "Other nonfaculty research staff with doctorates" were combined with postdoctoral appointees until 1979.
 - Separate data on students receiving their primary support from the U.S. Department of Agriculture were first requested in 1985.
 - Racial/ethnic data by sex were first requested in 1993 and became a standard item on the questionnaire in 1994.
 - Separate data on students receiving their primary support from the National Aeronautics and Space Administration were first requested in 1996.
 - A new Web-based reporting option was incorporated into the 1998 graduate student survey. Coordinators and departmental respondents both had the option of submitting their data through the World Wide Web. Using this new Web option, schools could avoid manually filling out the paper survey, and could obtain immediate feedback on their responses. This helped coordinators and departmental respondents ensure that their data were accurate and complete.
- Using this option also enabled respondents to upload their own data files, speeding up the reporting process.
- In 1999 separate data on students receiving their primary support from the Department of Energy were requested. In addition, respondents were presented with new Race/Ethnicity categories. The Asian/Pacific Islander category, used in previous years' surveys, was separated into an Asian category and a Native Hawaiian/Pacific Islander category. Two new categories, More than One Race Hispanic and More than One Race Non-Hispanic, were also added to the survey. The Other category, included in previous year's surveys, was removed from the 1999 survey. Also, 1999 was the first year in which first-time enrollment by Race/Ethnicity was requested. These changes are not reflected in the 2000 published tables. This year and last, the data reported in the new categories were combined into the previous survey categories for table production. The data were collapsed into the following categories: the data in the "Asian" category were combined with those in the "Native Hawaiian/Pacific Islander" category; data in the "One Race Only Hispanic" category and the "More than One Race Hispanic" category were combined to produce the "Hispanic" category on the tables; and data in the "More than One Race Non-Hispanic" category were combined with the "Unknown" category to form the "Other or Unknown" category on the tables.

DATA REVISIONS

During the fall 1988 survey cycle, the criteria for including departments in the survey universe were tightened, and all departments surveyed were reviewed. Those departments not primarily oriented toward granting research degrees were no longer considered to meet the definition of science and engineering. As a result of this review, it was determined that a number of departments—primarily those in the field of "Social sciences, not elsewhere classified"—were engaged in training primarily teachers, practitioners, administrators, or managers rather than researchers; these departments were deleted from the database. This process was continued during the 1989–97 survey cycles and expanded to ensure trend consistency for the entire 1975–97 period. As a result, total enrollments and social science enrollments for all years were reduced. The net effect of adjustments over the years is shown in technical table 8.

During the same period, the survey methodology changed so that the institution's highest S&E degree in the current year would apply to all previous years in which that institution was surveyed. Since a number of master's-granting institutions have become doctorate-granting institutions over the years, the result has been a smaller decrease in enrollment at doctorate-granting institutions than at master's-granting institutions. For the years 1975–76 and 1991–92, there was an increase in enrollment at doctorate-granting institutions after subsequent year modifications.

The definition of medical schools was revised during the fall 1992 survey cycle to include only those institutional components that are members of the Association of American Medical Colleges. Tables generated after the fall 1992 survey differ from their counterparts in earlier years in that they exclude schools of nursing, public health, dentistry, veterinary medicine, and other health-related disciplines; they should not be compared with tables from earlier years.

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Technical Table 1. The NSF data collection series: 1966-2000

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Year	Number of institutions surveyed	Number of reporting units surveyed	Number of departments surveyed			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full-time	Part-time
A. Graduate Traineeship Program								
1966	204	204	2,866	441	2,425	169,303	124,255	45,048
1967	209	209	3,014	434	2,580	179,622	133,972	45,650
1968	219	219	3,190	454	2,736	184,759	140,714	44,045
1969	224	224	3,354	460	2,894	196,341	147,515	48,826
1970	227	227	3,544	473	3,071	201,918	153,250	48,668
1971 ¹	224	249	3,397	407	2,990	214,680	164,764	49,916
B. Survey of Graduate Students and Postdoctorates in Science and Engineering ²								
Doctorate institutions:								
1972	260	328	4,593	780	3,813	210,895	161,329	49,566
1973	258	335	6,527	852	5,675	214,378	161,555	52,823
1974	279	369	7,474	1,390	6,084	260,001	190,589	69,412
1975	339	436	7,958	1,781	6,177	297,400	208,283	89,117
1976	349	447	8,056	1,838	6,218	301,688	212,045	89,643
1977	350	452	8,284	1,971	6,313	310,269	214,505	95,764
1978	328	436	8,261	1,874	6,387	303,275	210,265	93,010
1979	366	481	8,530	2,043	6,487	319,564	218,548	101,016
1980	365	480	8,634	2,090	6,544	329,168	224,663	104,505
1981	363	476	8,557	2,085	6,472	335,870	228,491	107,379
1982	360	474	8,413	2,070	6,343	342,064	231,541	110,523
1983	359	473	8,287	2,032	6,255	349,158	237,562	111,596
1984	341	459	8,261	1,972	6,289	350,446	238,206	112,240
1985	341	454	8,374	2,012	6,362	359,800	241,756	118,044
1986	341	456	8,448	2,023	6,425	370,398	250,437	119,961
1987	345	462	8,564	2,028	6,536	376,059	255,043	121,016
1988	364	482	8,851	2,153	6,698	382,724	260,856	121,868
1989	365	483	8,974	2,167	6,807	390,387	268,066	122,321
1990	364	482	9,121	2,216	6,905	404,402	276,847	127,555
1991	364	482	9,319	2,240	7,079	419,993	289,479	130,514
1992	364	482	9,555	2,288	7,267	439,470	303,786	135,684
1993	364	482	9,746	2,299	7,447	448,031	309,940	138,091
1994	363	481	9,955	2,355	7,600	448,679	311,583	137,096
1995	362	480	10,130	2,406	7,724	443,058	308,052	135,006
1996	363	481	10,145	2,457	7,688	437,590	306,851	130,739
1997	362	484	10,117	2,527	7,590	430,875	304,696	126,179
1998	362	483	10,195	2,535	7,660	428,156	303,777	124,379
1999	361	482	10,306	2,502	7,804	434,300	310,174	124,126
2000	360	481	10,349	2,545	7,804	435,612	316,531	119,081

See explanatory information, if any, and SOURCE at end of table.

Technical Table 1. The NSF data collection series: 1966-2000

Year	Number of institutions surveyed	Number of reporting units surveyed	Number of departments surveyed			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full-time	Part-time
Master's institutions:								
1975 ³	247	247	1,046	1,046	na	31,150	11,404	19,746
1976	247	247	1,055	1,055	na	32,067	11,401	20,666
1977	253	253	1,109	1,109	na	35,147	12,271	22,876
1978 ⁴	272	272	1,248	1,248	na	36,637	12,765	23,872
1979	265	265	1,157	1,157	na	38,045	13,242	24,803
1980	263	263	1,165	1,165	na	37,943	13,785	24,158
1981	261	261	1,172	1,172	na	39,288	13,585	25,703
1982	251	251	1,172	1,172	na	40,270	13,255	27,015
1983	251	251	1,181	1,181	na	41,316	14,493	26,823
1984 ⁵	71	71	530	530	na	44,224	15,716	28,508
1985 ⁵	71	71	537	537	na	44,221	15,531	28,690
1986 ⁵	71	71	537	537	na	45,122	15,731	29,391
1987 ⁵	71	71	540	540	na	45,438	16,013	29,425
1988	242	242	1,165	1,165	na	41,868	14,329	27,539
1989	244	244	1,214	1,214	na	44,165	14,645	29,520
1990	246	246	1,238	1,238	na	47,769	15,976	31,793
1991	245	245	1,280	1,280	na	51,291	17,576	33,715
1992	244	244	1,318	1,318	na	54,154	18,823	35,331
1993	242	242	1,358	1,358	na	56,378	19,761	36,617
1994	242	242	1,411	1,411	na	55,837	20,566	35,271
1995	241	241	1,437	1,437	na	56,692	21,304	35,388
1996	240	240	1,435	1,435	na	56,605	21,777	34,828
1997	239	239	1,473	1,473	na	56,441	22,689	33,752
1998	239	239	1,491	1,491	na	57,604	23,745	33,859
1999	238	238	1,523	1,523	na	59,110	24,247	34,863
2000	236	236	1,550	1,550	na	58,982	25,590	33,392

¹ The 1972 survey also collected selected data for 1971.

² The name of the survey was changed in 1981 to specify the inclusion of engineering.

³ The 1976 survey also collected 1975 data from master's-granting institutions.

⁴ Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

⁵ Master's-granting institutions were surveyed on a sample basis from 1984-87. See "Technical Notes" for further information.

KEY: na = Not available

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 2. Number of science, engineering, and health departments
in doctorate-granting institutions, by detailed field: 1993-2000**

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Field	1993	1994	1995	1996	1997	1998	1999	2000
Total, all surveyed fields	9,746	9,955	10,130	10,145	10,117	10,195	10,306	10,349
Total, science and engineering fields	6,999	7,138	7,258	7,253	7,270	7,331	7,404	7,450
Sciences, total	5,649	5,752	5,846	5,827	5,822	5,861	5,914	5,935
Physical sciences, total	578	579	587	581	583	587	588	586
Astronomy	34	34	35	35	35	36	36	38
Chemistry	276	275	275	275	276	275	279	276
Physics	251	253	255	251	254	256	250	246
Physical sciences, n.e.c.	17	17	22	20	18	20	23	26
Earth, atmos., & ocean sci., total	330	339	353	350	352	361	360	363
Atmospheric sciences	31	32	33	33	32	33	32	33
Geosciences	204	208	212	212	209	208	205	204
Oceanography	45	46	50	48	49	54	56	55
Earth, atmos., & ocean sci., n.e.c.	50	53	58	57	62	66	67	71
Mathematical sciences, total	391	397	402	402	400	397	397	394
Mathematics & applied mathematics	313	316	319	318	317	315	314	309
Statistics	78	81	83	84	83	82	83	85
Computer sciences	264	272	283	290	294	301	310	321
Agricultural sciences	312	318	324	318	328	333	327	330
Biological sciences, total	1,959	1,986	2,002	1,982	1,953	1,970	1,989	1,978
Anatomy	101	101	98	97	93	90	88	86
Biochemistry	189	190	192	191	191	191	193	186
Biology	240	239	239	241	247	251	252	251
Biometry/epidemiology	69	71	72	72	72	73	73	73
Biophysics	33	33	33	34	31	31	31	30
Botany	103	104	101	98	95	94	88	86
Cell biology	113	121	125	125	126	139	140	147
Ecology	27	31	31	30	29	30	35	36
Entomology/parasitology	49	49	48	48	48	49	47	46
Genetics	79	82	84	83	82	82	84	86
Microbio., immunology, & virology	257	258	262	261	251	254	261	260
Nutrition	117	122	126	125	123	124	125	124
Pathology	143	143	144	139	138	135	134	132
Pharmacology	168	169	169	164	159	158	162	160
Physiology	146	144	146	144	138	133	133	130
Zoology	49	49	48	44	40	39	39	35
Biosciences, n.e.c.	76	80	84	86	90	97	104	110
Psychology, total	529	545	561	566	573	576	592	598
Psychology, general	173	175	173	170	173	175	178	182
Clinical psychology	115	117	124	128	131	130	132	132
Psychology, n.e.c.	241	253	264	268	269	271	282	284
Social sciences, total	1,286	1,316	1,334	1,338	1,339	1,336	1,351	1,365
Agricultural economics	53	54	55	55	55	55	55	55
Anthropology (cultural & social)	130	132	135	135	138	135	135	133
Economics (except agricultural)	205	208	207	201	201	199	200	199
Geography	100	101	102	100	101	102	102	102
History and philosophy of science	20	21	21	23	23	23	24	26
Linguistics	69	69	70	72	71	70	71	72
Political science	326	332	338	339	341	342	345	349
Sociology	181	182	183	180	177	177	178	177
Sociology/anthropology	25	26	25	25	25	24	24	24
Social sciences, n.e.c.	177	191	198	208	207	209	217	228
Engineering, total	1,350	1,386	1,412	1,426	1,448	1,470	1,490	1,515
Aerospace engineering	50	52	53	52	54	54	56	57
Agricultural engineering	40	38	38	38	38	38	39	40
Biomedical engineering	56	57	59	61	64	72	77	81
Chemical engineering	142	143	143	145	145	145	148	149
Civil engineering	206	216	222	231	235	238	245	250
Electrical engineering	221	228	233	237	241	244	244	248
Engineering science	39	41	39	36	36	38	40	39
Industrial /manufacturing eng.	152	161	164	167	168	168	166	172
Mechanical engineering	187	189	191	191	191	192	192	191
Metallurgical/materials eng.	103	106	108	109	114	115	114	111
Mining engineering	30	29	26	24	24	24	24	25
Nuclear engineering	25	26	26	24	23	24	24	24
Petroleum engineering	20	20	21	20	18	17	16	18
Engineering, n.e.c.	79	80	89	91	97	101	105	110

See explanatory information, if any, and SOURCE at end of table.

**Technical Table 2. Number of science, engineering, and health departments
in doctorate-granting institutions, by detailed field: 1993-2000**

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Field	1993	1994	1995	1996	1997	1998	1999	2000
Total, health fields	2,747	2,817	2,872	2,892	2,847	2,864	2,902	2,899
Medical fields, total	2,033	2,085	2,124	2,125	2,065	2,064	2,082	2,042
Anesthesiology	86	88	88	90	89	89	86	87
Cardiology	69	70	71	71	71	71	72	71
Oncology/cancer research	48	50	55	57	62	63	71	70
Endocrinology	72	74	74	74	71	71	72	70
Gastroenterology	68	71	71	71	68	68	68	68
Hematology	71	73	73	72	71	69	72	71
Neurology	146	154	155	152	155	157	164	162
Obstetrics and gynecology	96	96	96	95	90	91	91	88
Ophthalmology	81	81	81	79	79	79	78	76
Otorhinolaryngology	71	72	72	72	68	64	64	62
Pediatrics	111	115	116	118	111	112	110	110
Preventive medicine/community health	179	183	188	189	187	194	198	196
Psychiatry	103	107	107	104	102	101	100	98
Pulmonary disease	67	68	69	68	66	67	66	64
Radiology	137	139	141	138	134	129	131	128
Surgery	246	251	257	259	245	244	246	240
Clinical medicine, n.e.c.	382	393	410	416	396	395	393	381
Other health fields, total	714	732	748	767	782	800	820	857
Dental sciences	91	88	87	86	81	78	79	82
Nursing	140	144	150	148	153	157	158	158
Pharmaceutical sciences	88	89	90	93	91	92	91	86
Speech pathology/audiology	135	137	138	139	141	142	144	153
Veterinary sciences	47	48	49	49	50	52	55	62
Health related, n.e.c.	213	226	234	252	266	279	293	316

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 3. Number of science, engineering, and health departments
in master's-granting institutions, by detailed field: 1993-2000**

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Field	1993	1994	1995	1996	1997	1998	1999	2000
Total, all surveyed fields	1,358	1,411	1,437	1,435	1,473	1,491	1,523	1,550
Total, science and engineering fields	1,184	1,227	1,239	1,225	1,251	1,261	1,273	1,284
Sciences, total	1,026	1,063	1,072	1,065	1,085	1,093	1,101	1,112
Physical sciences, total	112	113	110	106	110	109	106	101
Astronomy	0	0	0	0	0	0	0	0
Chemistry	71	71	67	65	66	65	64	63
Physics	30	30	30	29	30	30	28	26
Physical sciences, n.e.c.	11	12	13	12	14	14	14	12
Earth, atmos., & ocean sci., total	50	52	58	58	61	62	62	64
Atmospheric sciences	1	1	2	2	2	2	1	1
Geosciences	25	26	27	27	28	28	29	31
Oceanography	7	7	7	6	7	7	8	8
Earth, atmos., & ocean sci., n.e.c.	17	18	22	23	24	25	24	24
Mathematical sciences, total	97	98	98	97	100	99	99	97
Mathematics & applied mathematics	92	93	93	93	96	95	95	93
Statistics	5	5	5	4	4	4	4	4
Computer sciences	78	81	82	83	82	83	87	96
Agricultural sciences	26	32	33	31	30	31	31	28
Biological sciences, total	164	164	168	166	169	169	170	175
Anatomy	0	0	0	0	0	0	0	0
Biochemistry	3	4	4	4	4	4	3	3
Biology	125	123	123	124	125	125	125	123
Biometry/epidemiology	0	0	0	0	0	0	0	0
Biophysics	0	0	0	0	0	0	0	0
Botany	2	2	2	2	2	2	2	2
Cell biology	1	1	2	1	3	3	3	4
Ecology	3	3	3	2	4	4	4	5
Entomology/parasitology	0	0	0	0	0	0	0	0
Genetics	1	1	1	1	1	1	2	2
Microbio., immunology, & virology	2	2	2	2	3	2	2	3
Nutrition	11	13	15	15	13	14	14	14
Pathology	2	2	2	2	1	1	1	1
Pharmacology	1	0	0	0	0	1	1	1
Physiology	0	0	0	0	0	0	1	2
Zoology	2	2	2	2	2	2	2	2
Biosciences, n.e.c.	11	11	12	11	11	10	10	13
Psychology, total	223	231	228	230	238	237	244	244
Psychology, general	85	85	84	85	85	85	85	86
Clinical psychology	30	34	34	34	36	36	38	38
Psychology, n.e.c.	108	112	110	111	117	116	121	120
Social sciences, total	276	292	295	294	295	303	302	307
Agricultural economics	3	3	3	3	3	3	3	2
Anthropology (cultural & social)	11	11	11	11	12	12	13	13
Economics (except agricultural)	30	30	31	32	32	33	32	32
Geography	22	22	22	22	22	22	23	22
History and philosophy of science	0	0	0	0	0	2	2	3
Linguistics	7	7	7	7	7	7	7	7
Political science	96	103	105	105	103	103	105	109
Sociology	40	41	42	40	42	43	43	42
Sociology/anthropology	2	2	2	2	2	1	1	1
Social sciences, n.e.c.	65	73	72	72	72	77	73	76
Engineering, total	158	164	167	160	166	168	172	172
Aerospace engineering	2	4	4	3	3	3	3	3
Agricultural engineering	0	0	0	0	0	0	0	0
Biomedical engineering	4	4	4	3	4	4	4	4
Chemical engineering	6	6	7	7	7	7	6	6
Civil engineering	26	28	31	31	31	30	29	28
Electrical engineering	37	37	39	39	40	40	43	44
Engineering science	2	2	2	2	2	2	2	2
Industrial /manufacturing eng.	27	27	29	27	27	30	31	29
Mechanical engineering	20	20	21	19	20	21	22	23
Metallurgical/materials eng.	6	6	5	4	5	4	4	3
Mining engineering	4	4	2	2	2	2	2	2
Nuclear engineering	0	0	0	0	0	0	0	0
Petroleum engineering	1	1	1	1	1	1	1	1
Engineering, n.e.c.	23	25	22	22	24	24	25	27

See explanatory information, if any, and SOURCE at end of table.

**Technical Table 3. Number of science, engineering, and health departments
in master's-granting institutions, by detailed field: 1993-2000**

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Field	1993	1994	1995	1996	1997	1998	1999	2000
Total, health fields	174	184	198	210	222	230	250	266
Medical fields, total	12	15	16	14	15	17	19	19
Anesthesiology	3	3	3	2	3	3	3	3
Cardiology	0	0	0	0	0	0	0	0
Oncology/cancer research	0	0	0	0	0	0	0	0
Endocrinology	0	0	0	0	0	0	0	0
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	0	0	0	0	0	0	0	0
Neurology	0	0	0	0	0	0	0	0
Obstetrics and gynecology	0	0	0	0	0	0	0	0
Ophthalmology	0	0	0	0	0	0	0	0
Otorhinolaryngology	0	0	0	0	0	0	0	0
Pediatrics	0	0	0	0	0	0	0	0
Preventive medicine/community health	6	7	7	7	7	8	9	8
Psychiatry	1	2	2	1	1	1	1	1
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	0	0	1	1	1	1	1	1
Surgery	0	0	0	0	0	0	0	0
Clinical medicine, n.e.c.	2	3	3	3	3	4	5	6
Other health fields, total	162	169	182	196	207	213	231	247
Dental sciences	0	0	0	0	0	0	0	0
Nursing	51	54	63	66	70	71	80	86
Pharmaceutical sciences	2	1	1	1	1	2	2	2
Speech pathology/audiology	54	55	57	61	63	65	67	67
Veterinary sciences	0	0	0	0	0	0	0	0
Health related, n.e.c.	55	59	61	68	73	75	82	92

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 4. Original departmental response rates: 1975-2000

Year	Total	Complete response	Percent	Partial response	Percent	Non-response	Percent
1975 ¹	9,162	8,998	98.2	na	na	na	na
1976	9,275	9,148	98.6	na	na	na	na
1977	9,513	9,432	99.1	na	na	na	na
1978 ²	8,242	8,077	98.0	na	na	na	na
1979	9,796	9,446	96.4	na	na	na	na
1980	9,930	9,593	96.6	na	na	na	na
1981	9,917	8,594	86.7	613	6.2	710	7.2
1982	9,776	8,104	82.9	744	7.6	928	9.5
1983	9,663	8,070	83.5	816	8.4	777	8.0
1984 ³	8,748	7,490	85.6	643	7.4	615	7.0
1985 ³	9,025	7,818	86.6	672	7.4	535	5.9
1986 ³	9,097	7,817	85.9	779	8.6	501	5.5
1987 ³	9,254	8,030	86.8	715	7.7	509	5.5
1988	10,295	8,812	85.6	970	9.4	513	5.0
1989	10,318	8,908	86.3	891	8.6	519	5.0
1990	10,483	8,884	84.7	1,053	10.0	546	5.2
1991	10,705	9,052	84.6	1,186	11.1	467	4.4
1992	10,936	9,066	82.9	1,538	14.1	332	3.0
1993	11,146	9,156	82.1	1,555	14.0	435	3.9
1994	11,411	8,863	77.7	2,109	18.5	439	3.8
1995	11,598	9,514	82.0	1,730	14.9	354	3.1
1996	11,592	9,851	85.0	1,522	13.1	219	1.9
1997	11,597	9,720	83.8	1,665	14.4	212	1.8
1998	11,718	9,822	83.8	1,706	14.6	190	1.6
1999	11,833	9,396	79.4	2,289	19.3	148	1.3
2000	11,899	9,818	82.5	1,965	16.5	116	1.0

¹ The 1976 survey also collected 1975 data from master's-granting institutions.

² Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

³ These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984-87. See "Technical Notes" for further information.

NOTE: Departments providing partial responses are included in the complete response column prior to 1981 and reported separately beginning in 1981.

KEY: na = Not available

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 5. Imputation for nonresponse in doctorate-granting institutions,
by field and enrollment status: 1998-2000**

Area of science and engineering	Number of graduate departments		Graduate enrollment								
			Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full-time	Part-time	Postdoc-torates	Full-time	Part-time	Postdoc-torates	Full-time	Part-time	Postdoc-torates
Fall 2000											
Total, all areas	10,349	103	316,531	119,081	41,548	2,126	2,236	122	0.7	1.9	0.3
Physical sciences	586	3	26,104	3,259	5,880	12	17	0	.0	.5	.0
Earth, atmospheric, & ocean sciences	363	1	10,114	2,605	1,135	3	24	0	.0	.9	.0
Mathematical sciences	394	3	11,173	2,771	375	24	40	0	.2	1.4	.0
Computer sciences	321	5	23,282	16,404	352	130	243	0	.6	1.5	.0
Agricultural sciences	330	0	8,644	2,226	777	0	0	0	.0	.0	.0
Biological sciences	1,978	11	45,363	7,266	16,093	271	83	64	.6	1.1	.4
Psychology	598	16	28,562	9,686	698	535	262	1	1.9	2.7	.1
Social sciences	1,365	21	48,885	23,116	435	338	590	2	.7	2.6	.5
Engineering	1,515	14	70,969	28,166	3,208	177	192	13	.2	.7	.4
Health fields	2,899	29	43,435	23,582	12,595	636	785	42	1.5	3.3	.3
Fall 1999											
Total, all areas	10,306	122	310,174	124,126	40,194	4,296	2,991	472	1.4	2.4	1.2
Physical sciences	588	8	26,183	3,376	6,043	328	41	42	1.3	1.2	.7
Earth, atmospheric, & ocean sciences	360	3	10,049	2,763	919	47	1	6	.5	.0	.7
Mathematical sciences	397	6	11,200	3,141	348	110	42	0	1.0	1.3	.0
Computer sciences	310	6	20,267	15,311	328	219	177	0	1.1	1.2	.0
Agricultural sciences	327	4	8,648	2,488	709	178	77	8	2.1	3.1	1.1
Biological sciences	1,989	14	45,287	7,869	15,856	500	155	210	1.1	2.0	1.3
Psychology	592	13	28,726	10,903	703	626	425	10	2.2	3.9	1.4
Social sciences	1,351	23	49,626	23,896	452	660	742	5	1.3	3.1	1.1
Engineering	1,490	16	66,471	29,566	3,173	668	633	39	1.0	2.1	1.2
Health fields	2,902	29	43,717	24,813	11,663	960	698	152	2.2	2.8	1.3
Fall 1998											
Total, all areas	10,195	167	303,777	124,379	39,443	4,628	2,688	758	1.5	2.2	1.9
Physical sciences	587	6	25,943	3,514	5,885	114	8	9	.4	.2	.2
Earth, atmospheric, & ocean sciences	361	6	9,992	2,929	893	135	30	44	1.4	1.0	4.9
Mathematical sciences	397	5	11,150	3,432	274	268	75	4	2.4	2.2	1.5
Computer sciences	301	7	18,129	14,247	365	307	93	8	1.7	.7	2.2
Agricultural sciences	333	4	8,545	2,488	662	88	22	7	1.0	.9	1.1
Biological sciences	1,970	26	45,174	7,763	15,492	955	82	175	2.1	1.1	1.1
Psychology	576	15	29,015	11,321	606	785	310	8	2.7	2.7	1.3
Social sciences	1,336	19	50,139	23,101	389	584	687	0	1.2	3.0	.0
Engineering	1,470	9	63,870	30,355	2,835	443	334	21	.7	1.1	.7
Health fields	2,864	70	41,820	25,229	12,042	949	1,047	482	2.3	4.1	4.0

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 6. Imputation for nonresponse in master's-granting institutions,
by field and enrollment status: 1998-2000**

Area of science and engineering	Number of graduate departments		Graduate enrollment									
			Total in survey			Number imputed			Imputation rate (percent)			
	In universe	Totally imputed	Full-time	Part-time	Postdoc-torates	Full-time	Part-time	Postdoc-torates	Full-time	Part-time	Postdoc-torates	
Total, all areas	Fall 2000											
	1,550	13	25,590	33,392	89	186	583	0	0.7	1.7	0.0	
	101	0	448	652	68	0	0	0	.0	.0	.0	
	64	0	445	776	0	0	0	0	.0	.0	0	
	97	1	559	1,143	2	4	7	0	.7	.6	.0	
	96	1	3,362	4,546	3	21	63	0	.6	1.4	.0	
	28	0	469	345	2	0	0	0	.0	.0	.0	
	175	2	1,663	2,202	4	54	18	0	3.2	.8	.0	
	244	3	6,504	5,937	2	69	88	0	1.1	1.5	.0	
	307	5	3,844	7,614	4	34	312	0	.9	4.1	.0	
	172	0	1,636	3,830	2	0	0	0	.0	.0	.0	
	266	1	6,660	6,347	2	4	95	0	.1	1.5	.0	
	Total, all areas	Fall 1999										
		1,523	22	24,247	34,863	87	537	694	0	2.2	2.0	0.0
		106	2	452	680	64	1	2	0	.2	.3	.0
62		0	435	836	2	0	0	0	.0	.0	.0	
99		1	596	1,320	0	5	7	0	.8	.5	.0	
87		0	2,441	4,541	2	0	0	0	.0	.0	.0	
31		0	508	344	2	0	0	0	.0	.0	.0	
170		3	1,820	2,139	5	65	33	0	3.6	1.5	.0	
244		7	5,979	6,256	6	272	265	0	4.5	4.2	.0	
302		4	3,671	7,815	0	25	275	0	.7	3.5	0	
172		0	1,552	4,102	4	0	0	0	.0	.0	.0	
250		5	6,793	6,830	2	169	112	0	2.5	1.6	.0	
Total, all areas		Fall 1998										
		1,491	20	23,745	33,859	104	424	549	28	1.8	1.6	26.9
		109	2	448	670	79	15	21	28	3.3	3.1	35.4
	62	1	452	885	4	3	8	0	.7	.9	.0	
	99	1	601	1,302	0	1	0	0	.2	.0	0	
	83	1	1,843	3,808	3	8	6	0	.4	.2	.0	
	31	0	441	370	1	0	0	0	.0	.0	.0	
	169	0	1,818	2,239	6	0	0	0	.0	.0	.0	
	237	6	6,133	6,088	6	282	321	0	4.6	5.3	.0	
	303	8	3,683	7,108	0	102	147	0	2.8	2.1	0	
	168	0	1,565	4,248	4	0	0	0	.0	.0	.0	
	230	1	6,761	7,141	1	13	46	0	.2	.6	.0	

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 7. Imputation rates for all departments
at all graduate institutions: fall 2000**

[Number of imputed departments = 1,939]

Item 5. Full-time graduate students by source and mechanism of the largest amount of support received

Mechanism of support and sex of full-time S&E graduate students	Students receiving financial assistance											Self support (includ. loans & family sources)	Total for all sources (sum of columns A - L)
	Federal sources (excluding loans)								Non-Federal sources				
	DoD	HHS		NSF	Dept. of Agr.	NASA	DOE	Other Federal sources	Inst. support	Foreign sources	Other U.S. sources		
		NIH	Other HHS										
		(A)	(B)										
Full-time graduate S&E students:													
Graduate fellowships	19.9	18.8	33.6	10.4	10.3	9.4	0.6	8.6	12.0	12.0	17.2	N/A	12.3
Graduate traineeships	21.7	11.6	15.4	20.8	33.3	0.0	0.0	10.4	9.6	14.4	23.8	N/A	12.3
Graduate research asstships	14.8	9.8	3.8	12.3	2.0	12.4	1.9	12.2	11.2	7.6	11.0	N/A	10.0
Graduate teaching asstships	N/A	13.5	10.8	10.5	19.1	0.0	0.0	3.6	11.6	N/A	10.1	N/A	10.4
Other types of support	50.6	10.8	7.7	7.0	0.0	0.0	0.0	11.4	13.0	12.0	16.0	19.3	18.1
Full-time total	22.7	11.0	13.2	12.1	3.0	11.4	1.8	11.0	11.6	11.4	13.3	19.3	0.7
Full-time women	21.3	12.3	14.0	11.0	3.5	12.4	2.8	13.0	14.6	10.1	17.7	24.6	1.3

Items 6 and 7. Race/ethnicity of part-time and full-time graduate students by sex

Enrollment status and sex of S&E graduate students	U.S. citizens and permanent residents									Foreign (temporary visa holders)	Total (sum of columns A - J)
	One race only: Non-Hispanic/Latino					One race only	More than one race		Unknown		
	Black/ African American	American Indian/ Alaska Native	Asian American	Native Hawaiian/ Pacific Islander	White	Hispanic/ Latino	Hispanic/ Latino	Non- Hispanic/ Latino			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)			
Item 6											
Part-time, total	5.0	1.5	2.1	0.7	3.9	2.8	0.1	0.0	5.1	3.1	1.9
Men enrolled part-time	5.6	2.6	2.1	1.3	4.0	2.8	0.4	0.0	4.5	3.3	2.2
Women enrolled part-time	4.9	0.8	2.2	0.0	4.2	3.1	0.0	0.0	5.9	3.3	2.7
Item 7											
Full-time, total	3.8	1.1	1.6	2.0	3.4	3.0	0.1	0.8	2.1	3.3	0.7
Men enrolled full-time	3.5	1.4	1.5	3.3	3.7	3.4	0.0	2.0	3.2	3.6	1.8
Women enrolled full-time	4.3	1.1	1.6	0.6	3.6	3.0	0.2	9.3	1.4	2.9	1.3
Full-time first-time total ¹	na	na	na	na	na	na	na	na	na	na	0.7
Full-time first-time women	na	na	na	na	na	na	na	na	na	na	0.9

Item 8. S&E postdoctorates and nonfaculty research staff with doctorates

Sex and type of doctorate	Postdoctorates						Other non- faculty research staff with doctor- ates
	Source of support				Total for all sources (A - D)	Foreign postdoc- torates	
	Federal			Non- Federal			
	Fellow- ships	Trainee- ships	Research grants				
	(A)	(B)	(C)	(D)	(E)	(F)	
Total	16.1	5.3	7.2	13.5	0.3	2.4	2.8
Women	14.3	4.1	7.3	8.8	2.6	2.3	3.0
With MD, DO, DDS or DVM degrees ..	28.5	4.7	5.4	9.4	3.3	2.3	3.9

¹ Full-time first-time detail data not imputed

KEY: DoD = Department of Defense
 DOE = Department of Energy
 HHS = Department of Health & Human Services
 NASA = National Aeronautics & Space Administration
 NIH = National Institutes of Health
 NSF = National Science Foundation
 N/A = Not applicable
 na = Not available

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 8. Comparison of graduate enrollment data as originally published and as modified through the fall 2000 graduate student survey cycle: 1975-2000

Page 1 of 2

Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
Total graduate enrollment in surveyed fields									
1975 ¹	336,843	328,550	-2.5	290,662	297,400	2.3	46,181	31,150	-32.5
1976	345,979	333,755	-3.5	297,280	301,688	1.5	48,699	32,067	-34.2
1977	362,978	345,416	-4.8	306,710	310,269	1.2	56,268	35,147	-37.5
1978 ²	na	339,912	na	311,982	303,275	-2.8	na	36,637	na
1979	375,267	357,609	-4.7	321,770	319,564	-.7	53,497	38,045	-28.9
1980	383,210	367,111	-4.2	333,658	329,168	-1.3	49,552	37,943	-23.4
1981	392,034	375,158	-4.3	340,203	335,870	-1.3	51,831	39,288	-24.2
1982	399,682	382,334	-4.3	347,414	342,064	-1.5	52,268	40,270	-23.0
1983	413,564	390,474	-5.6	358,276	349,158	-2.5	55,288	41,316	-25.3
1984 ³	415,064	394,670	-4.9	363,470	350,446	-3.6	51,594	44,224	-14.3
1985 ³	434,836	404,021	-7.1	371,052	359,800	-3.0	63,784	44,221	-30.7
1986 ³	446,102	415,520	-6.9	384,203	370,398	-3.6	61,899	45,122	-27.1
1987 ³	449,585	421,497	-6.2	388,681	376,059	-3.2	60,904	45,438	-25.4
1988	445,595	424,592	-4.7	391,683	382,724	-2.3	53,912	41,868	-22.3
1989	440,983	434,552	-1.5	385,025	390,387	1.4	55,958	44,165	-21.1
1990	458,943	452,171	-1.5	398,405	404,402	1.5	60,538	47,769	-21.1
1991	475,691	471,284	-.9	411,296	419,993	2.1	64,395	51,291	-20.3
1992	495,397	493,624	-.4	427,792	439,470	2.7	67,605	54,154	-19.9
1993	506,678	504,409	-.4	440,875	448,031	1.6	65,803	56,378	-14.3
1994	506,626	504,516	-.4	441,480	448,679	1.6	65,146	55,837	-14.3
1995	501,510	499,750	-.4	436,328	443,058	1.5	65,182	56,692	-13.0
1996	494,526	494,195	-.1	430,631	437,590	1.6	63,895	56,605	-11.4
1997	487,104	487,316	.0	424,650	430,875	1.5	62,454	56,441	-9.6
1998	485,754	485,760	.0	422,834	428,156	1.3	62,920	57,604	-8.4
1999	493,425	493,410	.0	432,657	434,300	.4	60,768	59,110	-2.7
2000	494,594	na	na	435,612	na	na	58,982	na	na
Full-time									
1975 ¹	228,316	219,687	-3.8	210,641	208,283	-1.1	17,675	11,404	-35.5
1976	233,748	223,446	-4.4	215,355	212,045	-1.5	18,393	11,401	-38.0
1977	238,202	226,776	-4.8	218,226	214,505	-1.7	19,976	12,271	-38.6
1978 ²	na	223,030	na	217,588	210,265	-3.4	na	12,765	na
1979	243,331	231,790	-4.7	224,057	218,548	-2.5	19,274	13,242	-31.3
1980	249,111	238,448	-4.3	230,601	224,663	-2.6	18,510	13,785	-25.5
1981	253,428	242,076	-4.5	234,529	228,491	-2.6	18,899	13,585	-28.1
1982	255,959	244,796	-4.4	237,676	231,541	-2.6	18,283	13,255	-27.5
1983	263,800	252,055	-4.5	243,646	237,562	-2.5	20,154	14,493	-28.1
1984 ³	264,146	253,922	-3.9	246,848	238,206	-3.5	17,298	15,716	-9.1
1985 ³	269,319	257,287	-4.5	249,666	241,756	-3.2	19,653	15,531	-21.0
1986 ³	279,235	266,168	-4.7	259,980	250,437	-3.7	19,255	15,731	-18.3
1987 ³	285,200	271,056	-5.0	264,862	255,043	-3.7	20,338	16,013	-21.3
1988	288,619	275,185	-4.7	268,385	260,856	-2.8	20,234	14,329	-29.2
1989	286,619	282,711	-1.4	267,554	268,066	.2	19,065	14,645	-23.2
1990	295,836	292,823	-1.0	275,262	276,847	.6	20,574	15,976	-22.3
1991	308,669	307,055	-.5	286,756	289,479	.9	21,913	17,576	-19.8
1992	323,399	322,609	-.2	299,753	303,786	1.3	23,646	18,823	-20.4
1993	330,249	329,701	-.2	307,181	309,940	.9	23,068	19,761	-14.3
1994	331,969	332,149	.1	307,964	311,583	1.2	24,005	20,566	-14.3
1995	330,235	329,356	-.3	305,652	308,052	.8	24,583	21,304	-13.3
1996	328,368	328,628	.1	303,586	306,851	1.1	24,782	21,777	-12.1
1997	326,842	327,385	.2	301,573	304,696	1.0	25,269	22,689	-10.2
1998	327,609	327,522	.0	301,544	303,777	.7	26,065	23,745	-8.9
1999	334,405	334,421	.0	309,466	310,174	.2	24,939	24,247	-2.8
2000	342,121	na	na	316,531	na	na	25,590	na	na

See explanatory information, if any, and SOURCE at end of table.

Technical Table 8. Comparison of graduate enrollment data as originally published and as modified through the fall 2000 graduate student survey cycle: 1975-2000

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Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
Part-time									
1975 ¹	108,527	108,863	0.3	80,021	89,117	11.4	28,506	19,746	-30.7
1976	112,231	110,309	-1.7	81,925	89,643	9.4	30,306	20,666	-31.8
1977	124,776	118,640	-4.9	88,484	95,764	8.2	36,292	22,876	-37.0
1978 ²	na	116,882	na	94,394	93,010	-1.5	na	23,872	na
1979	131,936	125,819	-4.6	97,713	101,016	3.4	34,223	24,803	-27.5
1980	134,099	128,663	-4.1	103,057	104,505	1.4	31,042	24,158	-22.2
1981	138,606	133,082	-4.0	105,674	107,379	1.6	32,932	25,703	-22.0
1982	143,723	137,538	-4.3	109,738	110,523	.7	33,985	27,015	-20.5
1983	149,764	138,419	-7.6	114,630	111,596	-2.6	35,134	26,823	-23.7
1984 ³	150,918	140,748	-6.7	116,622	112,240	-3.8	34,296	28,508	-16.9
1985 ³	165,517	146,734	-11.3	121,386	118,044	-2.8	44,131	28,690	-35.0
1986 ³	166,867	149,352	-10.5	124,223	119,961	-3.4	42,644	29,391	-31.1
1987 ³	164,385	150,441	-8.5	123,819	121,016	-2.3	40,566	29,425	-27.5
1988	156,976	149,407	-4.8	123,298	121,868	-1.2	33,678	27,539	-18.2
1989	154,364	151,841	-1.6	117,471	122,321	4.1	36,893	29,520	-20.0
1990	163,107	159,348	-2.3	123,143	127,555	3.6	39,964	31,793	-20.4
1991	167,022	164,229	-1.7	124,540	130,514	4.8	42,482	33,715	-20.6
1992	171,998	171,015	-.6	128,039	135,684	6.0	43,959	35,331	-19.6
1993	176,429	174,708	-1.0	133,694	138,091	3.3	42,735	36,617	-14.3
1994	174,657	172,367	-1.3	133,516	137,096	2.7	41,141	35,271	-14.3
1995	171,275	170,394	-.5	130,676	135,006	3.3	40,599	35,388	-12.8
1996	166,158	165,567	-.4	127,045	130,739	2.9	39,113	34,828	-11.0
1997	160,262	159,931	-.2	123,077	126,179	2.5	37,185	33,752	-9.2
1998	158,145	158,238	.1	121,290	124,379	2.5	36,855	33,859	-8.1
1999	159,020	158,989	.0	123,191	124,126	.8	35,829	34,863	-2.7
2000	152,473	na	na	119,081	na	na	33,392	na	na

¹ The 1976 survey also collected 1975 data from master's-granting institutions.

² Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

³ These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984-87. See "Technical Notes" for further information.

NOTE: The percent change column is presented as a measure of retroactive changes in survey definitions. Three survey changes in the late 1980s and early 1990s had a retroactive effect on figures reported for earlier years. First, degree-granting status (doctorate or master's) used to be determined by an institution's status each year. Beginning in 1992, degree-granting status was determined by the status reported in the latest survey year. This change shifted numerous institutions (and students) from master's-granting to doctorate-granting categories for years before 1992. Second, in 1988 guidelines to determine S&E departments were tightened. This change meant retroactively dropping departments in fields like educational psychology, social work, and cultural studies from the survey population. Third, improved estimates were generated for years in which enrollments at master's-granting institutions were sampled (1984-87).

KEY: na = Not available

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering